Ministry of Northern Development and Mines

Ontario

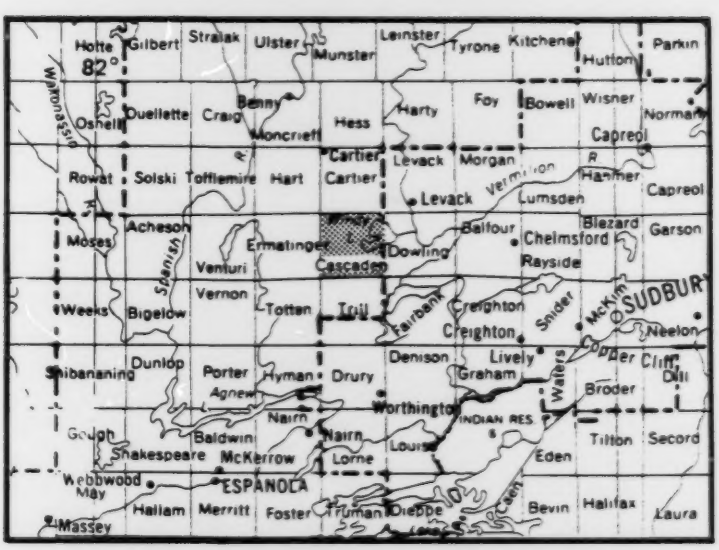
Mines and Minerals Division

ONTARIO GEOLOGICAL SURVEY

GEOLOGICAL DATA INVENTORY FOLIO 460

CASCADEN TOWNSHIP

Compiled by the Staff of
the Resident Geologist's Office
Sudbury



LOCATION MAP

Scale: 1:1 013 760 or 1 inch to 16 miles

CANADA ONTARIO Mineral Development Exploitation Minerale

This project is part of the five year Canada–Ontario 1985 Mineral Development Agreement (COMDA), a subsidiary agreement to the Economic and Regional Development Agreement (ERDA) signed by the governments of Canada and Ontario.

90-00700/

NTS Number 41 I/11

Mining Claim Map Number M.706

This project is part of the Canada-Ontario Mineral Development Agreement (COMDA)

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Geological Survey does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey
1989: Cascaden Township, Ontario Geological Survey, Data Inventory Folio 460, compiled by the staff of the Resident Geologist's Office, Sudbury; 24 pages and 2 Maps.

Original Compilation by: LACEY, Kerry

Date	Page Revised	Revised by

Date	Page Revised	Revised by

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ACCOMPANYING MAPS

Property Location Map 1 map

Exploration Data Map 1 map

Map Scale 1: 31 680 or 1 inch to ½ mile

CONVERSION FACTORS FOR MEASUREMENTS IN ONTARIO GEOLOGICAL SURVEY PUBLICATIONS

If the reader wishes to convert imperial units to SI (metric) units or SI units to imperial units the following multipliers should be used:

CONVERSION FROM SI TO IMPERIAL			CONVERSION FROM IMPERIAL TO SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
			LENGTH		
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709 7	chains	1 chain	**20.116 8**	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
			AREA		
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	**2.589 988**	km^2
1 ha	2.471 054	acres	1 acre	**0.404 685 6**	ha
			VOLUME		
1 cm^3	0.061 02	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	**0.028 316 85**	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	**0.764 555**	m^3
			CAPACITY		
1 L	1.759 755	pints	1 pint	**0.568 261**	L
1 L	0.879 877	quarts	1 quart	**1.136 522**	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
			MASS		
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	**28.349 523**	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 908 8**	t
			CONCENTRATION		
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	**34.285 714 2**	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	**1.714 285 7**	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy)/ton (short)	20.0	pennyweights/ton (short)
1 pennyweight/ton (short)	0.05	ounce (troy)/ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

NOTE–Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries published by The Mining Association of Canada in co-operation with the Coal Association of Canada.

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no'; if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	Yes	K.L.
2	Assessment Files Research Office, Toronto	N.A.	K.L.
3	ODM General Index; 9volumes	Yes	K.L.
4	Catalogue of Airborne Geophysical Surveys (ODM)	No	K.L.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	Yes	K.L.
6	ODM Industrial Mineral Reports	No	K.L.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	No	K.L.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	Yes	K.L.
9	Newspaper Clippings File	Yes	K.L.
10	GSC Index to Publications	Yes	K.L.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	K.L.
12	OGS Index Maps	Yes	K.L.
13	Source Mineral Deposit Records (O.G.S.)	Yes	K.L.
14	Author - Subject Articles File	Yes	K.L.
15	Miscellaneous Papers: ODM & OGS	Yes	K.L.
16	ODM Geological Circulars: OGS Study Series	Yes	K.L.
17	ODM Preliminary Reports: ODM Bulletins	Yes	K.L.
18	ODM – OGS Open File Reports	Yes	K.L.
19	OGS Northern Ontario Engineering Geology Terrain Studies	Yes	K.L.
20	OGS Aggregate Resources Inventory Papers	No	K.L.
21	OGS Mineral Potential Maps	Yes	K.L.
22	Theses on File, Sudbury	Yes	K.L.
23	Aerial Photographs on File, Sudbury	Yes	K.L.

METALS AND MINERALS REFERENCES LIST

△ anh. . . . . .Anhydrite
△ ank. . . . . .Ankerite
△ anna . . . . . Annabergite
△ ap. . . . . .Apatite
△ arg . . . . . Argentite
△ As . . . . . .Arsenic
△ asp . . . . . .Arsenopyrite
△ asb . . . . . .Asbestos
△ ba. . . . . .Barite
△ be. . . . . .Beryl
△ Bi. . . . . .Bismuth
△ bn . . . . . .Bornite
△ bran . . . . . .Brannerite
△ bruc . . . . . .Brucite
△ Cd . . . . . Cadmium
△ calc. . . . . Calcite
△ carb . . . . . .Carbonate
△ cel . . . . . .Celestite
△ cc. . . . . .Chalcocite
△ cp. . . . . .Chalcopyrite
△ ch. . . . . .Chert
△ clay . . . . . .Clay
△ Co . . . . . Cobalt
△ cob. . . . . Cobaltite
△ cb. . . . . .Columbite
▲ Cu . . . . . .Copper
△ cor . . . . . Corundum
△ dol . . . . . Dolomite
△ ep. . . . . Epidote
△ ery . . . . . Erythrite
△ fel . . . . . .Feldspar
△ fl . . . . . .Fluorite (flurospar)
△ fu. . . . . .Fuchsite
△ gn. . . . . .Galena
△ gt. . . . . .Garnet
△ goe . . . . . .Goethite
△ Au . . . . . Gold
△ gf. . . . . .Graphite
△ gl . . . . . Gravel
△ gyp. . . . . .Gypsum
△ hem . . . . . Hematite
△ il . . . . . .Ilmenite
△ Fe . . . . . .Iron
△ IF. . . . . Iron Formation
△ jas . . . . . Jasper
△ kaol . . . . . .Kaolinite (kaolin)
△ ky . . . . . Kyanite
△ Pb . . . . . Lead
△ lim . . . . . Limonite
△ Li. . . . . Lithium
△ mgst . . . . . .Magnesite
△ mag . . . . . .Magnetite
△ mc . . . . . Malachite
△ Mn . . . . . Manganese
△ mb . . . . . .Marble
△ mar. . . . . Marcasite
△ ma . . . . . .Marl
△ mi . . . . . Mica
△ ml . . . . . .Millerite
△ mo . . . . . Molybdenite
△ Mo . . . . . .Molybdenum
△ mon . . . . . Monazite
△ ne. . . . . Nephelite (nepheline)
△ nc. . . . . .Niccolite
▲ Ni. . . . . Nickel
△ Nb . . . . . .Niobium
△ Pd . . . . . .Palladium
△ peat . . . . . .Peat
△ pent . . . . . .Pentlandite
△ Pt. . . . . .Platinum
△ py . . . . . .Pyrite
△ pyl . . . . . Pyrochlore
△ pyrl . . . . . .Pyrolusite
△ po . . . . . .Pyrrhotite
△ q . . . . . .Quartz
△ qcv . . . . .Quartz carbonate vein
△ ra. . . . . .Radioactive minerals
△ RE . . . . . .Rare Earths
△ sd. . . . . Sand
△ sgl . . . . . Sand and gravel
△ ss. . . . . .Sandstone
△ scap . . . . . Scapolite
△ shee . . . . . .Scheelite
△ serp . . . . . Serpentine
△ sh. . . . . .Shale
△ sid . . . . . Siderite
△ si . . . . . .Silica
△ Ag . . . . . .Silver
△ sl . . . . . Slate
△ sm . . . . . .Smaltite
△ sod. . . . . .Sodalite
△ spec . . . . . Specularite
△ sp. . . . . .Sphalerite
△ spd. . . . . .Spodumene
△ staur . . . . . .Staurolite
△ stib. . . . . Stibnite
△ st . . . . . .Stone
△ talc. . . . . .Talc
△ Te . . . . . Tellurium
△ td. . . . . Tetrahedrite
△ th. . . . . .Thorite
△ Th . . . . . .Thorium
△ thuc . . . . . Thucholite
△ ti . . . . . Titanite
△ Ti. . . . . Titanium
△ tour . . . . . .Tourmaline
△ trap . . . . . .Trap rock
△ W. . . . . Tungsten
△ uran . . . . . Uraninite
△ U . . . . . .Uranium
△ verm . . . . . .Vermiculite
△ Y . . . . . Yttrium
△ Zn . . . . . .Zinc
△ zr. . . . . Zircon

Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

MINERAL OCCURRENCES

Map Ref. Letter	Name(s)	Mineralization	Source Mineral Deposit Record	References in OGS Mineral Deposits Circulars & OGS Industrial Mineral Reports	Additional References and/or Remarks
A	Windy Lake	Ni, Cu	Cu 1	MRC 12, p. 273 MRC 2, p. 103	Canadian Mining Journal 1957, Vol.78, No. 1, p.96

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
COMPANY/AUTHOR (file number)																				
1	Airnorth Mines Ltd. (Cascaden 0011-E1)				65															
2	Airnorth Mines Ltd. (Cascaden 0011-D1)				65															
3	Airnorth Mines Ltd. (Cascaden 0011-C1)				**65**															
4	Airnorth Mines Ltd. (Cascaden 0021-C1)				67			67												
5	Airnorth Mines Ltd. (Cascaden 0016-A1)												66							
6	Inco Ltd. (Cascaden 0012-A1)				51															
7	Inco Ltd. (Cascaden 0012-C1)				69															
8	Inco Ltd. (Cascaden 0012-D1)				69															
9	Inco Ltd. (Cascaden 0012-D1)				69															
10	Inco Ltd. (Cascaden 0012-D1)				69															
11	Inco Ltd. (Cascaden 0012-D1)				69															

CASCADEN TOWNSHIP

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
COMPANY/AUTHOR (file number)																				
12	Inco Ltd. (Cascaden 0014-C1)				56															
13	Inco Ltd. (Cascaden 0010-D1)				50															
14	Inco Ltd. (Cascaden 0010-D1)				51															
15	Inco Ltd. (Cascaden 0010-E1)				50															
16	Inco Ltd. (Cascaden 0010-E1)				50															
17	Inco Ltd. (Cascaden 0011-B1)				51															
18	Inco Ltd. (Cascaden 0010-C1)				50															
19	Inco Ltd. (Cascaden 0010-C1)				50															
20	Inco Ltd. (Cascaden 0010-C1)				51															
21	Inco Ltd. (Cascaden 0016-B1)											51								
22	Inco Ltd. (Cascaden 0021-A1)	47?										47?								
23	Arcadia Nickel Mines Ltd. (Cascaden 0013-A1)				57															
24	Arcadia Nickel Mines Ltd. (Cascaden 0011-A1)				57															

GDIF FORM NO. 2

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
COMPANY/AUTHOR (file number)																				
25	Rosen, A. E. (Cascaden 0016-C1)												57							
26	Mining Corporation of Canada (Cascaden 0012-B1)				53															
27	Mining Corporation of Canada (Cascaden 0014-B1)				53															
28	Mining Corporation of Canada (Cascaden 0014-A1)				53															
29	Eastview Mines Ltd. (Cascaden 0021-B1)	56						56												
30	Eastview Mines Ltd. (Cascaden 0017)	57															57			
31	Falconbridge Nickel Mines Ltd. Chemical Research Corp. (Cascaden 0013-B1)				54															
32	Falconbridge Nickel Mines Ltd. Chemical Research Corp. (Cascaden 0013-B1)				54															
33	Falconbridge Nickel Mines Ltd. (Cascaden 0010-A1)				51, 52, 53															

GDIF FORM NO. 2

CASCADEN TOWNSHIP

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
COMPANY/AUTHOR (file number)																				
34	Falconbridge Nickel Mines Ltd. (Cascaden 0010-B1)				51 52 53															
35	Falconbridge Nickel Mines Ltd. (Cascaden 0015-A1)				51 52 53															
36	Falconbridge Nickel Mines Ltd. (Cascaden 0015-A1)				51															
37	Falconbridge Nickel Mines Ltd. (Cascaden 0015-A1)				54															
38	Falconbridge Nickel Mines Ltd. (Cascaden 0015-A1)				54 55 56 57 60															
39	Falconbridge Nickel Mines Ltd. (Cascaden 0020)	50										50	50							
40	Johnston, D. (Cascaden 0015-C1)				55															
41	Noranda Mines Ltd. (Cascaden 0019)	53										53								

GDIF FORM NO. 2

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE COMPANY/AUTHOR (file number)		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
42	Chemical Research Corporation Ontario Department of Mines (Cascaden 0018)											53	53							

GDIF FORM NO. 2

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole Degrees	Thickness of Overburden Feet	Total Length of Hole Feet	Mineralization Noted in Log	Assay Data Included for
1	Airnorth Mines Ltd.	1	1965	N60W	45	12	525	po, cp	
2		2	1965	S50W	45	4	500	py	
3		3	1965	S15W	45	2	512	py, cp	
4		5	1967	S27W	45	12	802		
5	Inco Ltd.	7455	1951		90	5	2800		
6		41255	1969	211	72	14	3282		
7		36968	1969		90	8	1082		
8		36969	1969		90	25	1096		
9		36970	1969		90	10	1084		
10		36971	1969		90	7	1094		
11		13084	1956	N30E	65	27	1000		
12		7453	1950		90	45	2790		
13		5995	1951		90	8	170		
14		7451	1950		90	8	753	py, po	
15		7457	1950		90	5	2277	py, po	
16		9616A	1951	S30W	45	38	38		
17		9616	1951	S30W	65	34	34		
18		9607	1951	N30E	50	7	251		
19		7452	1950		90	98	1907		
20		7454	1950		90	57	2410		
21		7456	1951		90	45	2720		
22	Arcadia Nickel Mines Ltd.	M-1	1957	N50E	60	3	1045	py, po, cp	
23		M1P	1957		90	0	40		
23		M2P	1957		90	0	40		
24	Mining Corporation of	2	1953	200	35	8	361		
25	Canada	7	1953	135	35	75	400		
26		1	1953	225	35	19	361		
27	Falconbridge Nickel Mines	1	1954		90	347	616	Minor sulphides	
28	Ltd.	2	1954		90	350	838		
29		3	1954		90	344	344		
30		4	1954		90	341	943	Minor sulphides	
31		5	1954		90	355	603		
32		6	1954		90	7	100		
33		7	1954		90	13	2356	Minor sulphides	

GDIF FORM NO. 3

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden	Total Length of Hole	Mineralization Noted in Log	Assay Data Included for
34	Falconbridge (cont'd)	C-1	1951		90	0	450		
35		C-XC-1	1952	S35W	50	0	360		
36		Ca-XC-4	1953	S40W	45	0	275		
37		Ca-XC-5	1953	S40W	60	0	175		
38		C-4	1951	N	60	0	237		
39		C-5	1951				100	py	
40		C-XC-4	1952	N20E	50	0	360	py, po	
41		Ca-XC-7	1953	N30E	40	0	286	Minor sulphides	
42		Ca-XC-8	1953	N30E	65	0	294	py, po	
43		Ca-XC-3	1952	N10W	60	0	360	py, po	
44		Ca-XC-6	1953	N20W	60	0	222	py, po	
45		C-2	1951		90	2	393		
46		C-3	1951		90	0	438	py	
47		C-XC-2	1952	S40E	50	0	360		
48		Ca-XC-2	1953	S35W	40	0	290		
49		Ca-XC-3	1953	S35W	45	0	214		
50		Ca-XC-2	1954	S20E	45	0	200		
51		Ca-XC-3	1954	S20E	50	0	200		
52		Ca-XC-1	1954	S80E	45	0	160		
53		C-XC-1	1955	N10W	53	0	160		
54		Ca-XC-1	1956		90	0	160		
55		C-XC-1	1957		90	0	160		
56		C-XC-1	1960		90	0	160		
57	Johnston, D.	1	1955	S45E	22	0	128		

GDIF FORM NO. 3

CASCADEN TOWNSHIP

AIRBORNE GEOPHYSICAL SURVEY DATA

No.	By For	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing

GDIF FORM NO. 4

Map Sample Site Reference Number	GEOCHEMICAL SURVEY DATA		By	Reference
	Type of Survey	Analysis For		

GDIF FORM NO. 5

MISCELLANEOUS DATA

AGE DATING

Site	Method	Material	Reference	Result

NEWSPAPER CLIPPINGS FILE

NOTE: A file of newspaper clippings about the companies listed below, who have worked in this area, is maintained in the Regional/Resident Geologist's Office. SUDBURY

Airnorth to Drill on Sudbury Property

Northern Miner February 18, 1965

GDIF FORM NO. 7

ODM GENERAL INDEX SEARCH

Words searched:

AIRNORTH MINES LTD.
ARCADIA NICKEL MINES LTD.
CASCADEN-(LAKE; TOWNSHIP)
EASTVIEW MINES LTD.
FALCO-NI-MINES-LTD.
INCO LTD.
JOHNSTON, D.
MINING CORP. OF CANADA LTD.
NORANDA EXPLORATION CO. LTD.
ROSEN, A. E.
SUDBURY OFFSET (SUDBURY)
WINDY LAKE

Index Volume	Listing:	Report Volume	Part	Page
1	CASCADEN TP., Sud.			
	Rocks in, diabase, I	1		76
	nickel-bearing, XIII (i) 196; XIV (iii)	13	1	64
	south of island	14	3	84
	see also Windy Lake			
	Swamps in, XIII (i)	13	1	193
1	WINDY LAKE, Cascaden and Dowling tps.			
	Absence of Gossan	14	3	16, 63
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	Glaciation near	14	3	102-103
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	gabbro	12		294
	greenstone	1		75
	Laurentian	14	3	10
	nickel-eruptive	12		
	and photo	13	1	208-210
	norite	14	3	109
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ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:	Report Volume	Part	Page
2	WINDY LAKE, Cascaden tp., cont'd			
	Section from, to Romford junction, showing elevations, N.C.			R110
2	SUDBURY NICKEL RANGE			
	Cross-section, theoretical, N.C.			R121
	Exploration, early, N.C.			R32
	Geology, notes, N.C.			R105-125
6	CASCADEN TP., Sud.			
	Faulting	65	3	38
	Rocks. Map 1956-1	65	3	
9	CASCADEN TP., SUDBURY DIST.			
	Geology (quaternary) of the Sudbury Basin Area	GR181		
	Sand and gravel	GR181		44,66-67

GDIF FORM NO. 8

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	1965,67	Cartier Sheet	Map P.287	1" = 2 miles
Card, K. D., Lumbers, S.B.	1974,76	Sudbury-Cobalt Geological Compilation (revised)	OGS Map 2361	1" = 4 miles
Dressler, B. O.	1983	Sudbury Mining Area - West part	Map P.2602	1:50 000
	1984	Sudbury Geological Compilation	OGS Map 2491	1:50 000
Lafleur, J., Maerz, N., and Dressler, B. O.	1982	Precambrian Geology of Cascaden Township	Map P.2525	1" = 1/4 mile
		GEOPHYSICAL MAPS		
ODM-GSC	1965	Aeromagnetic Map - Cartier	Map 1524-G	1" = 1 mile
	1965	Aeromagnetic Map - Chelmsford	Map 1518-G	1' = 1 mile
	1965	Aeromagnetic Map - Sudbury Sheet	Map 7067-G	1" = 4 miles
	1976	Uranium Reconnaissance Program Airborne Gamma Ray Spectrometer Survey, Sudbury	Map P.1610	1:250 000
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	1972	Sudbury Quaternary Geology	Map 2397	1:50 000
E. M. R.	1975	Topographic Map, Cartier		1:50 000
	1975	Topographic Map, Chelmsford		1:50 000
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	1980	N.O.E.G.T. Study 94, Cartier Area		
	1980	N.O.E.G.T.S. General Construction Capability Map, Cartier	Map 5004	1:100 000
	1987	Surficial Geology of Northern Ontario	OGS Map 2518	1:1 200 000
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		GEOCHEMICAL MAPS		
		No data available March 1, 1988		

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		GEOLOGICAL REPORTS AND MAPS		
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Barlow, A. E.	1901	Nickel and Copper Deposits	GSC AR 14, pt. H	p. 75
Burrows, A. G., Rickaby, H. C.	1929	Sudbury Basin Area	ODM AR 38, pt. 3, Map 38g	p. 49 1" = 1 1/2 mile
Burwasser, G. J.	1976	Quaternary Geology and Granular Resources of the Sudbury Basin Area	OGS OFR 5185	p. 89
	1979	Quaternary Geology of the Sudbury Basin Area, District of Sudbury	OGS GR 181	
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	1905	The Sudbury Nickel Field	BOM AR 14, pt. 3	pp. 95-96
	1912	Geological Map of Sudbury Nickel Region	Canada Dept. of Mines, Mines Branch	1" = 1 mile
Cooke, H. C.	1946	Problems of Sudbury Geology, Ontario	GSC Bulletin 3	
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Lafleur, J., Dressler, B. O.	1985	Geology of Cascaden, Dowling, Levack and Trill Tps., District of Sudbury	OGS OFR 5533	
Milne, V. G., White, O. L. Barlow, R. B., Kustra, C.R.	1979	Summary of Field Work, 1979 of the OGS	OGS MP 90	pp. 109-111
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Author	Date	Title	Reference	Map Scales and/or Report Pages
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Beales, F. W. and Lozej, G. P.	1975	Sudbury Basin Sediments and the Meteoritic Impact Theory of Origin for the Sudbury Structure	Can. J. Earth Sci. Vol. 12	pp. 629-635
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SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages

GDIF FORM NO.9

NOTES AND ADDENDA

AERIAL PHOTOGRAPHS INDEX

Scale 1" = 1/4 mile

Sudbury Files

Year	Roll	Line	Number
1977	88	4626	14 - 21
	88	4625	12 - 18
	89	4624	134 - 141
	89	4622	147 - 153
1973	19	4626	236
	19	4626	229 - 230
	19	4625	105 - 107
	18	4624	245 - 249
	17	4223	242 - 249

Ontario

Ministry of
Northern Development
and Mines

Min
Min
Divi

ONTARIO GEOLOGICAL SURVEY

PROPERTY LOCATION MAP

GEOLOGICAL DATA INVENTORY FOLIO 460

(Map 1 of 2)

CASCADEN TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

Old Sawmill Lake

Windy L. Provincial Park

Paleline Lake

Duck Id.

Tom Id.

Pine Id.

Leask Id.

Beaucage Id.

Lonely Id.

Green Id.

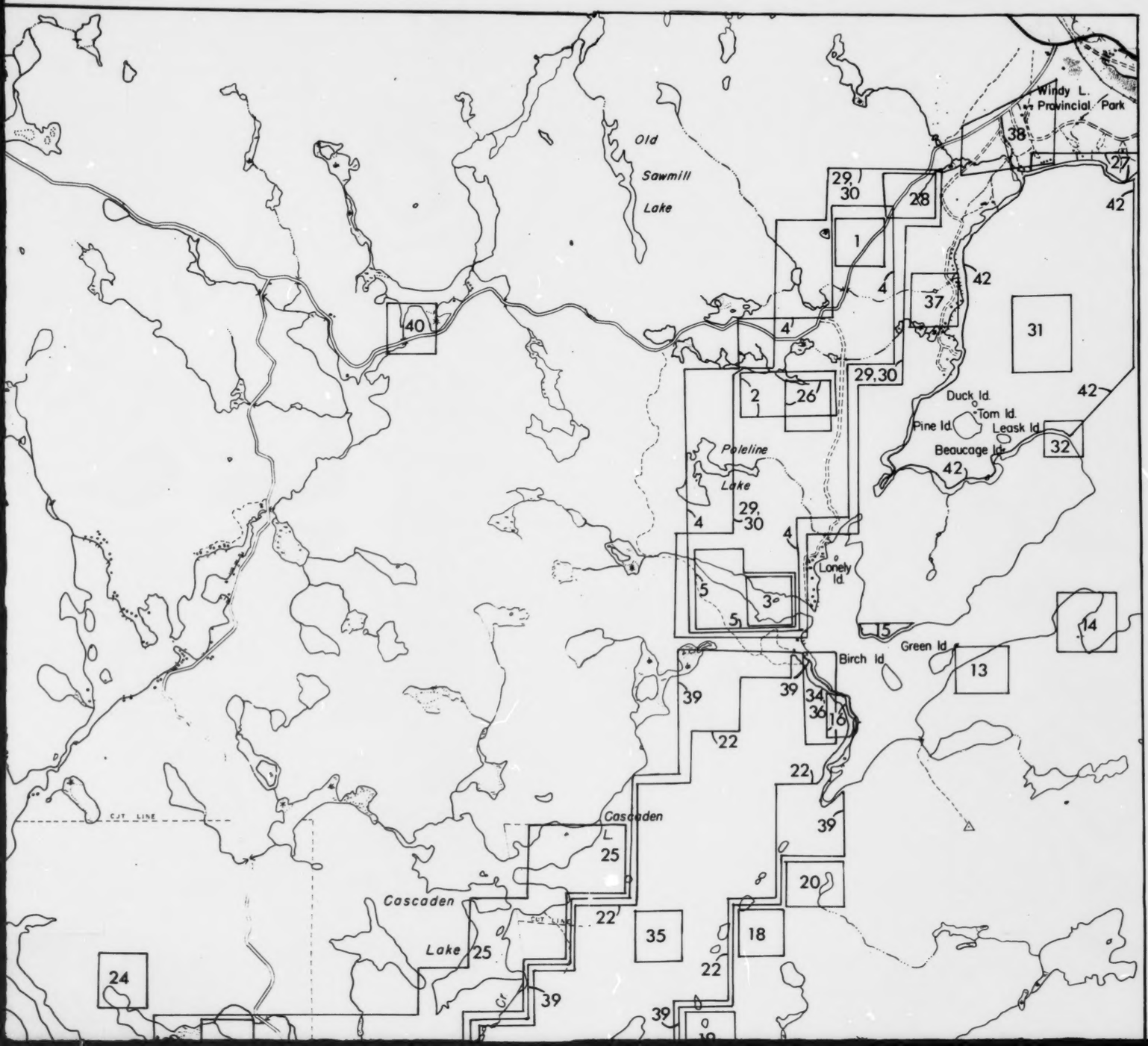
Birch Id.

Cascaden L.

Cascaden Lake

CUT LINE

40 29, 30 28 1 4 37 42 31 2 26 29,30 32 27 38 42 42 42 4 4 3 5 5 15 14 13 39 39 34 36 16 22 22 22 39 20 35 18 22 39 39 25 25 22 39 24 23 41



Ministry of Northern Development and Mines

Mines and Minerals Division

Ontario

ONTARIO GEOLOGICAL SURVEY

PROPERTY LOCATION MAP

GEOLOGICAL DATA INVENTORY FOLIO 460

(Map 1 of 2)

CASCADEN TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

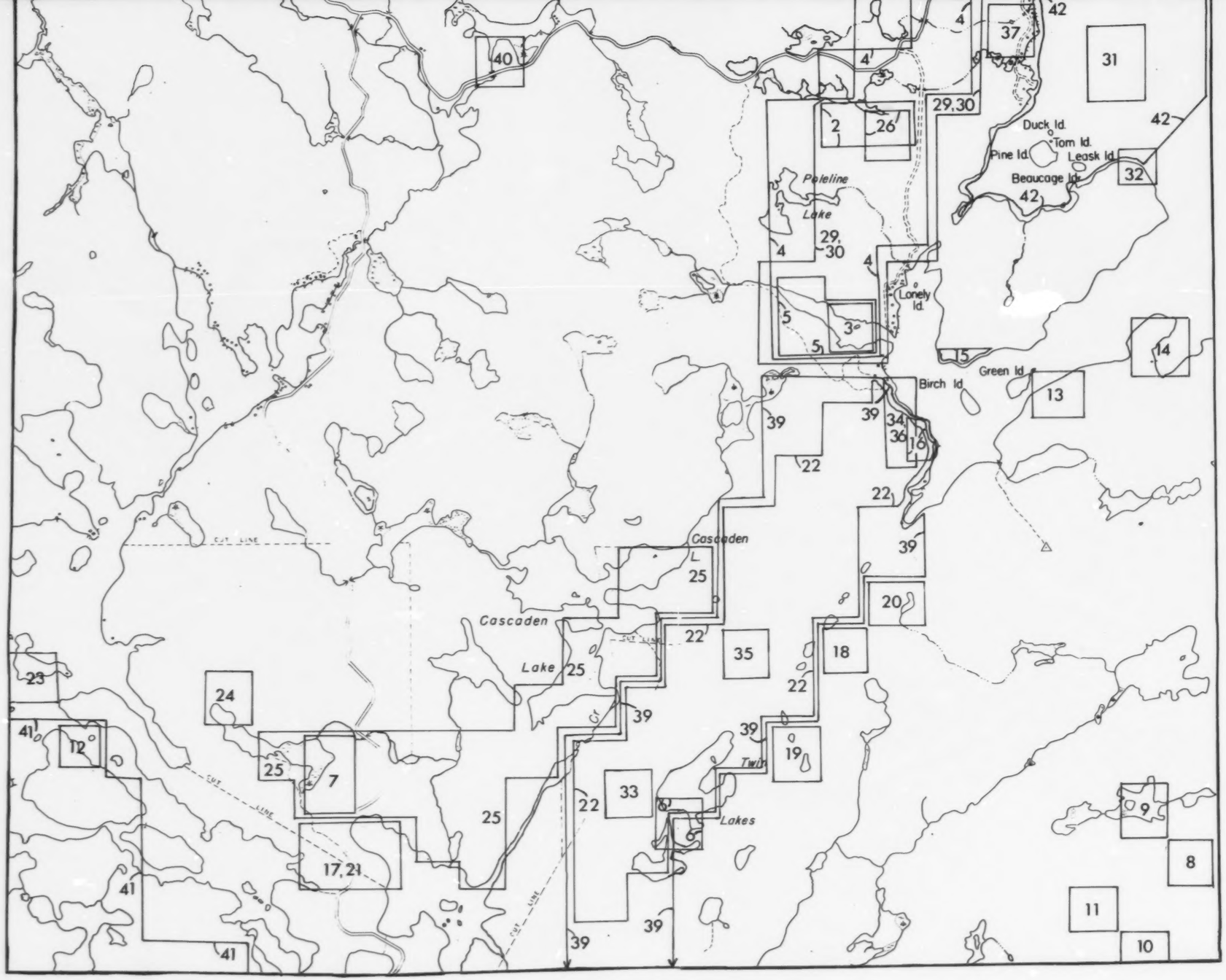
Mile 0.5 0 0.5 1 Mile

CASCADEN TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile



EXPLORATION DATA FILE AREAS

- ■ ① ⑥ — Reference number is always inside work area outlined. See listing in text pages.
- □ x ④ — Small area of exploration
- □ ★ — File covers whole township or area

CASCADEN TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

Paleline Lake

Cascaden Lake

Duck Id.
Tom Id.
Pine Id.
Leask Id.
Beaucage Id.
Lonely Id.
Birch Id.
Green Id.
Twin Lakes

CUT LINE

EXPLORATION DATA FILE AREAS

Reference number is always inside work area outlined. See listing in text pages.

Small area of exploration

File covers whole township or area

TYPES OF DATA SHOWN ON THIS MAP

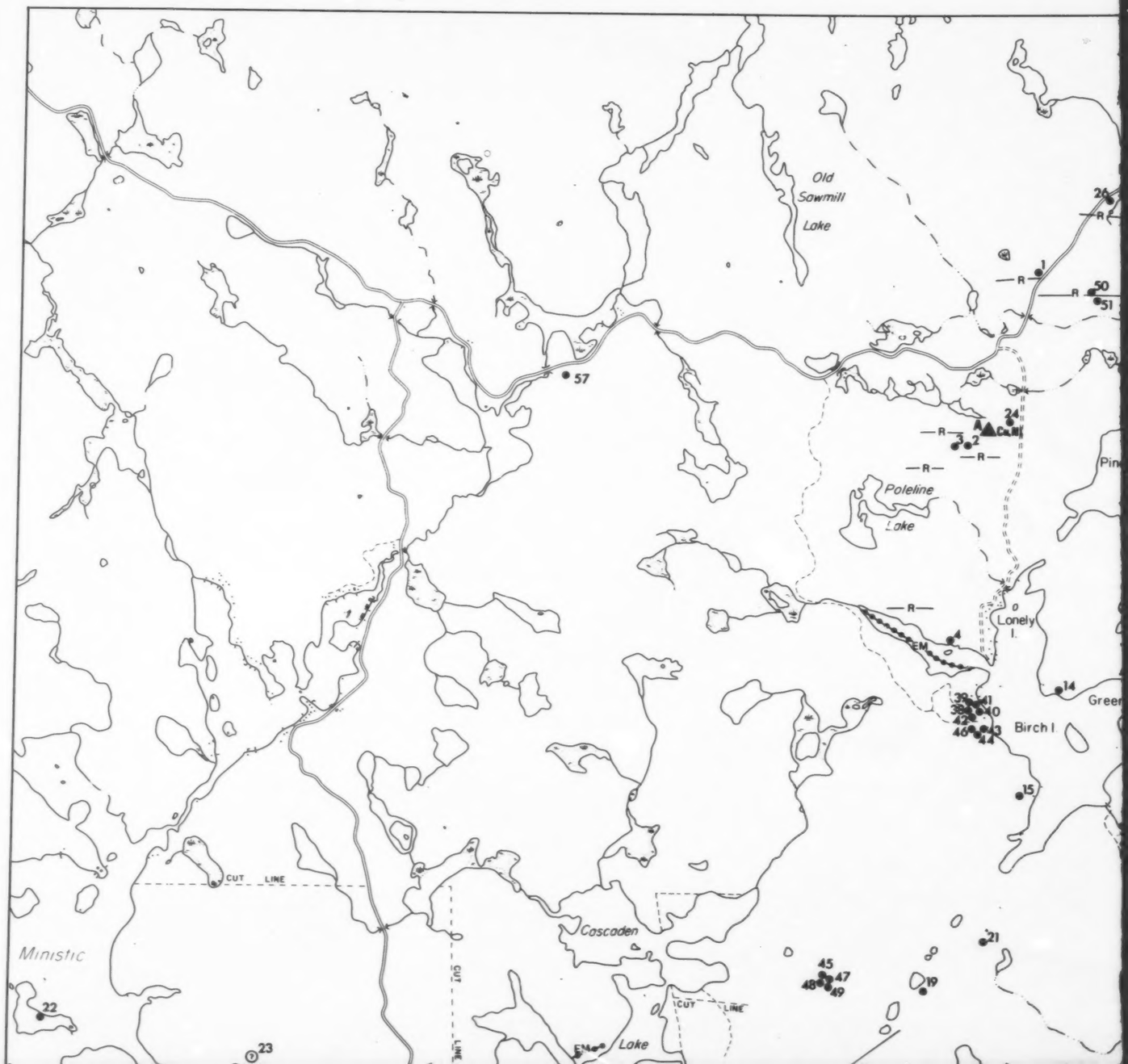
GEOCHEMICAL AND GEOCHRONOLOGICAL DATA

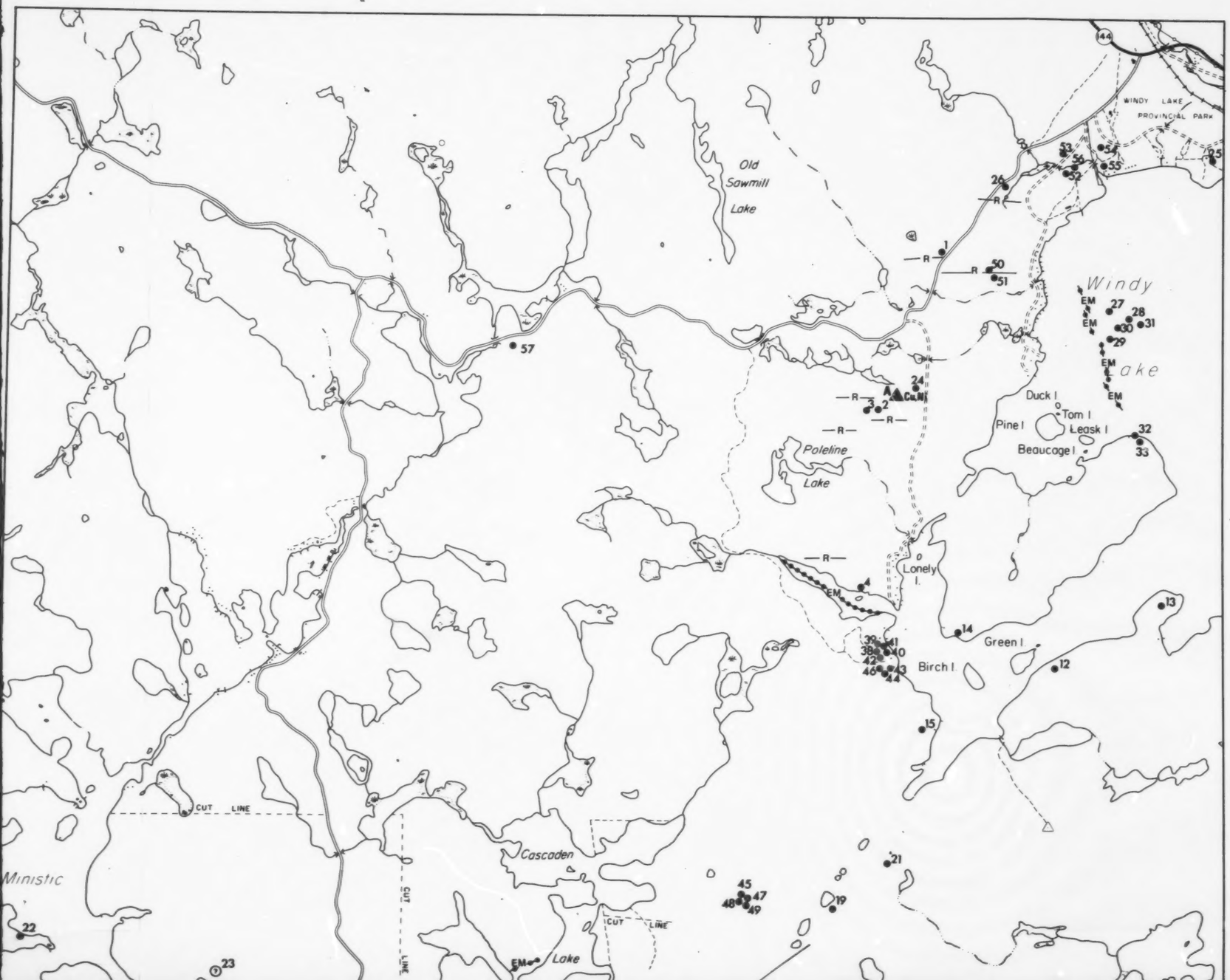
- ☐ ◆³ — Geochemical sample site, with reference number
- ☐ ◆³ — Area of geochemical sampling, with reference number
- ☐ ✳² — Age dating material sampling site, with reference number

GEOPHYSICAL ANOMALIES

- ☐ AM — Airborne magnetic anomaly
- ☐ — Airborne electromagnetic anomaly Length of anomaly along flight line
- ☐ AEM — Airborne electromagnetic anomaly
- ☐ — Airborne electromagnetic ar omaly Conductor axis
- ☐ ARA — Airborne radiometric anomaly
- ■ M — Ground magnetic anomaly
- ■ VL — Ground electromagnetic anomaly (VL - Vertical loop; HL - Horizontal loop VLF - Very low freq.; Turam; JEM - Crone Em - 16; EM - Undefined)
- ☐ RA — Ground radiometric anomaly
- ☐ IP — Induced polarization anomaly
- ☐ SP — Self potential anomaly
- ☐ AFMAG — Audio-frequency magnetic anomaly (total intensity)
- ■ R — Resistivity anomaly
- ☐ GR — Gravity anomaly

MISCELLANEOUS DATA





Ministry of Northern Development and Mines

Ontario

Mines and Minerals Division

ONTARIO GEOLOGICAL SURVEY

EXPLORATION DATA MAP

GEOLOGICAL DATA INVENTORY FOLIO 460

(Map 2 of 2)

CASCADEN TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

GEOLOGICAL AND MINING SYMBOLS

TYPES OF DATA SHOWN ON THIS MAP

MINERAL OCCURRENCES

- Cp A. — Mineral occurrence at surface, with reference letter
- Au A. 84' — Mineral occurrence with shaft, depth given with reference letter
- Ag A. — Mineral occurrence reported but exact location uncertain, with reference letter
- Cp A. — Mineralized float with reference letter
- A. — Mineral occurrence in drillhole, with reference letter, and drillhole number

DRILLHOLES

- 2 — Location of single drillhole, with reference number

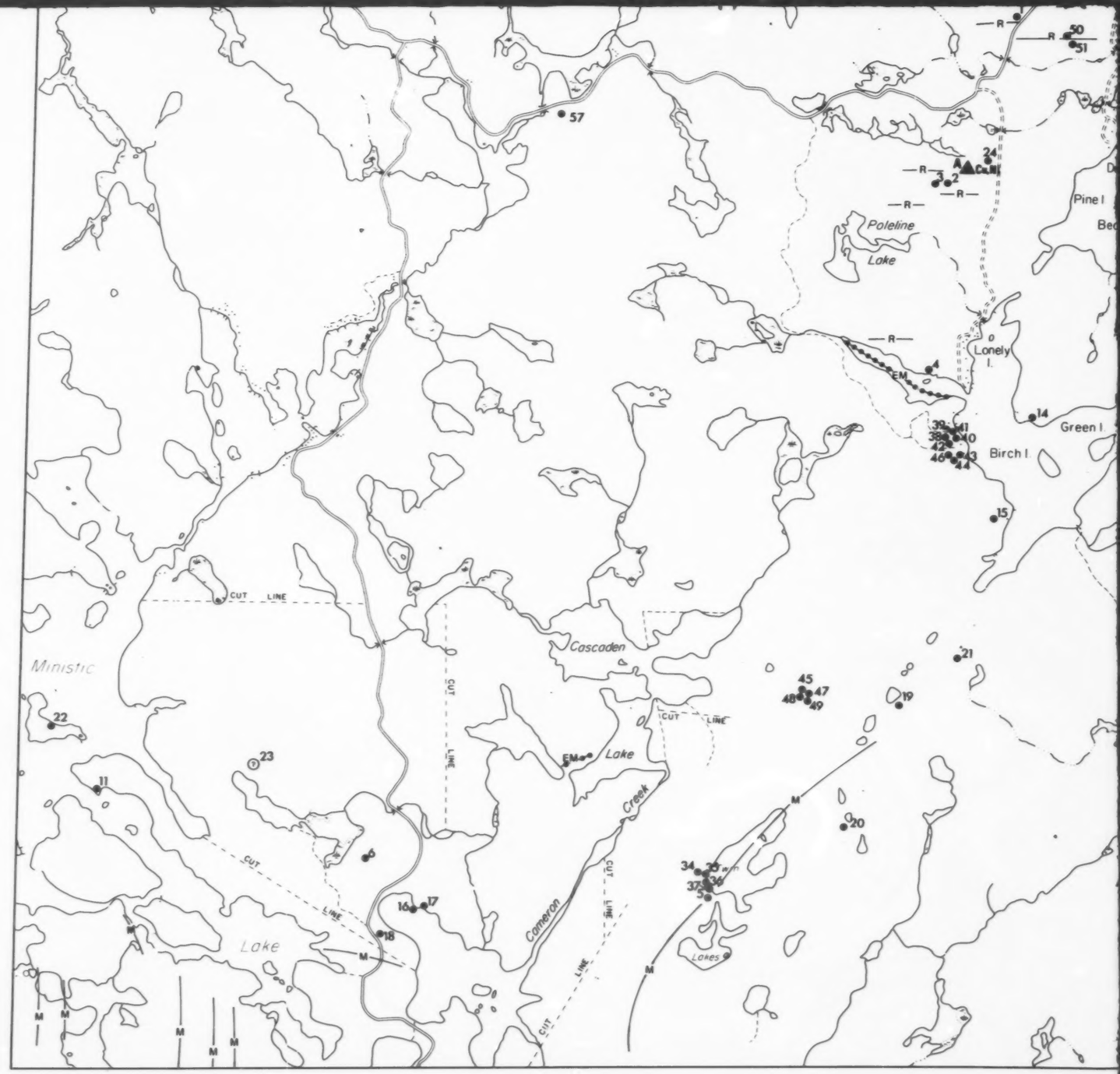
GEOPHYSICAL ANOMALIES

- ☐ AM — Airborne magnetic anomaly
- ☐ — Airborne electromagnetic anomaly
  Length of anomaly along flight line
- ☐ AEM — Airborne electromagnetic anomaly
- ☐ — Airborne electromagnetic anomaly
  Conductor axis
- ☐ ARA — Airborne radiometric anomaly
- ■ M — Ground magnetic anomaly
- ■ VL — Ground electromagnetic anomaly
  (VL - Vertical loop; HL - Horizontal loop
  VLF - Very low freq.; Turam; JEM -
  Crone Em - 16; EM - Undefined)
- ☐ RA — Ground radiometric anomaly
- ☐ IP — Induced polarization anomaly
- ☐ SP — Self potential anomaly
- ☐ AFMAG — Audio-frequency magnetic anomaly
  (total intensity)
- ■ R — Resistivity anomaly
- ☐ GR — Gravity anomaly

MISCELLANEOUS DATA

- ☐ Trenching, pit
- ☐ Adit
- ☐ Open pit
- ☐ Rock quarry
- ☐ Sand and/or gravel pit

NOTE: Consult the text that accompanies this map for pertinent lists of data, references, and abbreviations.



(Map 2 of 2)

CASCADEN TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

GEOLOGICAL AND MINING SYMBOLS

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- Ag A. — Mineral occurrence reported but exact location uncertain, with reference letter
- cp A. — Mineralized float with reference letter
- A. — Mineral occurrence in drillhole, with reference letter, and drillhole number

DRILLHOLES

- ●² — Location of single drillhole, with reference number
- ◉² — Location of closely spaced group of drillholes, with reference number
- (?)² — Drillhole, exact location uncertain, with reference number
- Property with underground drillholes in this general area, with reference number
- ○² — Property with drillholes which have not been plotted on map, with reference number
- ⊕² — Reverse circulation drillhole; churn drilling, with reference number

46°32'

81°26'